



Small Water Systems

Problems with Small Water Systems

Currently, over 98% of the population of California served by community water systems receives drinking water that meets all primary drinking water standards. While this is admirable, the remaining population is served by systems that fail one or more health-based standards. Predominantly, these people are located in disadvantaged communities¹ or are served by small water systems² in rural areas. These water systems typically cannot charge rates sufficient for maintenance and operation, or to undertake repairs and upgrades.

Though there are the same standards for all public water systems, compliance is more likely in higher-income metropolitan areas, and thus this becomes a health equity issue and potentially an environmental justice issue. The CDPH Drinking Water Program and its funding stakeholders have identified this as a priority focus for the program.

There are approximately 2,100 small community water systems in California. Of these, approximately 8% violate one or more health-based drinking water standards. CDPH has identified an improved rate of compliance of these systems as a performance measure in its Internal Operations Performance Plan (Strategic Plan). CDPH is coordinating multiple staff (headquarters staff, field staff and local health departments), resources (funding, technical assistance), and partners (third-party contractors) to address these systems.

CDPH intends to address 21 systems per year over a three-year period. These are the most challenging systems to correct because of their lack of resources and limited opportunity for economies of scale. It is CDPH's goal to make sure that these systems have the Technical, Managerial, and Financial (TMF) capacity to achieve and maintain full compliance with safe drinking water standards.

To ensure that systems can maintain compliance, it is imperative that the water rates in these communities be set at a rate that provides for adequate operations and maintenance (O&M), as well as replacement of facilities over time. While recent legislative efforts allow CDPH to provide 100% grant to certain water systems serving severely disadvantaged communities for infrastructure improvements, there are still those systems who will not be able to afford the ongoing O&M costs.

¹ Median household income is less than 80% of the statewide median

² Community water systems with fewer than 1,000 service connections and population served less than 3,300



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CDPH Actions to Address Small Water Systems

CDPH is working on multiple fronts to address these issues:

Funding

To date, the Safe Drinking Water State Revolving Fund (SDWSRF) has provided over \$1 billion in loans and grants for water system infrastructure improvements in California. Eighty percent (80%) of this funding has come from the federal government, matched by 20% state funding (general funds and bond funds). Of the total SDWSRF funding, 73 projects were for small water systems at a cost of more than \$41 million.

Technical Assistance

CDPH provides technical assistance on funding applications and TMF capacity building. This is accomplished by a small team of three to four staff, and contractors (California Rural Water Association, Rural Community Assistance Corporation, and Self Help Enterprises). CDPH provides nearly \$2 million per year to these contractors.

Enforcement and Compliance

CDPH uses its enforcement authority to compel water systems to come into compliance. Water systems that make no progress towards correcting deficiencies, such as applying for funds, are subject to citations and fines. This is not the preferred approach to achieve compliance, but is necessary in certain circumstances. As a drinking water primacy state, California is required by US EPA to take more rigorous enforcement actions.



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CDPH Internal Operations Performance Plan (Strategic Plan)

Goal: Promote social and physical environments that support good health for all

Objective: Increase the percentage of small community water systems meeting Safe Drinking Water Standards

Data and Data Source to Track Progress toward Objective: In California, there are approx. 2100 small community water systems that each serves less than a population of 3,300 people (and fewer than 1,000 service connections). Approx. 8% of these systems violate a health-based water quality standard. The strategy proposes to improve water quality for approximately 21 of these small disadvantaged water systems, each year, for the next 3 years. Various tracking methods will be used including U.S. Environmental Protection Agency's national Enforcement Targeting Tool (ETT) and CDPH State Revolving Fund Loan Grant Tracking System.

Strategy: Provide technical resources, infrastructure funding and enforcement activities to improve drinking water infrastructure.

Action Plan Description: Provide technical resources, infrastructure funding and enforcement activities that increase the number of small disadvantaged community drinking water systems that comply with Safe Drinking Water Standards.